

Proposal for Several Amendments
To the Drug Statutes,
Massachusetts General Law
Chapter 94C

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Executive Summary

This proposal is for the consideration of several amendments to the drug statutes which will accomplish the following:

- 1) update the language of the cocaine section and correct certain flaws which create unnecessary burdens on forensic labs which must certify its status for the courts.
- 2) clarify the language which defines MDMA (Ecstacy) and several PCP precursors, which puts variations of these compounds beyond the law
- 3) move several drugs from the class E level (lowest Massachusetts level) to the more appropriate level of class A (analogous to the Schedule 1 position they occupy in the federal schedules)
- 4) add the hallucinogenic compounds of the plant *Salvia Divinorum* to the class C schedule

The first consideration of this amendment proposal concerns the language of the schedule B drug cocaine. The law's current form has evolved from a pre World War II statute which defines cocaine as the natural extract of the coca plant. When cocaine is extracted from the plant it may be recovered as the base compound "cocaine" in various salt forms i.e., cocaine hydrochloride, cocaine sulfate, cocaine phosphate, etc. Through various changes the cocaine schedule has accounted for the various salts which may occur.

However the antique portion of the language creates a problem in the analytical lab, charged with the certification of the drug as cocaine under the law. The archaic language restricts prohibition to the cocaine salts and derivatives prepared from the leaves of the coca plant. The cocaine base extracted from the plant is the naturally occurring "l" form. The cocaine base can exist in a second synthetic form designated "d". Because the archaic language of the Massachusetts statute does not make the "d" form contraband only the "l" form is illegal. The problem in the forensic certification of the illegal plant derived "l" form is to account for it not being the synthetic and unscheduled "d" form.

Any large organic molecule can exist in two forms. That is, any molecule can exist in one form with a particular structure and in a second form with the very same constituent atoms in a mirror image. Cocaine produced by the coca plant exists in a molecular form designated "l". A second theoretical form would exist with the same constituent atoms bonded into a molecular form which is a mirror image of the "l" form. This theoretical cocaine is designated "d". This theoretical form does not occur in nature and can only be produced synthetically at a relatively high cost of materials and labor. Because the manufacture of the "d" form is labor intensive and the price of precursors in the synthesis is steep, synthetic "d" cocaine does not exist in the underground market. However, because the statute prohibits only the natural form occurring in the coca plant, the lab certifying the presence of cocaine must perform the additional tests to determine that any cocaine detected is indeed the "l" form.

M.G.L. chapter 94c under class B paragraph notes:

"(4) Coca leaves and any salt, compound, derivative or preparation of coca leaves, and any salt, compound derivative, or preparation thereof which is chemically equivalent or identical with any of these substances, except that the substances shall not include decocainized leaves or extraction of coca leaves, which extractions do not contain cocaine or ecgonine."

Paragraph (4) limits cocaine prohibition to the plant product alone. The problem for the lab arises in this manner. The statute prohibits only the form of cocaine which is produced by the plant. The synthetic form is not covered by the statute, so the chemist is obliged to perform extra time consuming tests to determine that the naturally produced "l" isomer is present and is indeed contraband. Furthermore, a cutting agent which has recently appeared in cocaine is confounding the tests which make the distinction. The federal model for cocaine scheduling has language which accounts for all forms of cocaine.

The archaic structure of the statute compels the analytical chemist to perform additional tests to establish that the l-cocaine is present and not the other form. Additionally, the relatively recent appearance of the cutting agent levamisole may be reducing the effectiveness of the extra tests which make the "d" or "l" distinction. This additional testing could be eliminated with the adoption of the language in the federal scheduling of cocaine. In this language, all forms or isomers of cocaine and the various salts are proscribed. Under the federal model, the additional tests distinguishing l-cocaine from d-cocaine are unnecessary. This time and labor may be redirected toward the identification of the more analytically complex "designer" drugs.

The federal scheduling has wording which includes the non-plant variations. However, like the state schedule, the federal statute imbeds cocaine within the opium language. For clarification, the cocaine descriptors should not be commingled with the opium description. The current cocaine language should be struck and replaced with the new language in isolation from opium. The federal cocaine statute follows:

United States Code Title 21 Section 812

(a) Unless specifically excepted or unless listed in another schedule, any of the following substances whether produced directly or indirectly by extraction from substances of vegetable origin, or independently by means of chemical synthesis, or by a combination of extraction and chemical synthesis:

(1) Opium and opiate, and any salt compound, derivative, or preparation of opium or opiate.

(2) Any salt, compound, derivative, or preparation thereof which is chemically equivalent or identical with any of the substances referred to in clause (1), except that these substances shall not include the isoquinoline alkaloids of opium.

(3) Opium and poppy straw.

(4) coca leaves, except coca leaves and extracts of coca leaves from which cocaine, ecgonine, and derivatives of ecgonine or their salts have been removed; cocaine, its salts, optical and geometric isomers, and salts of isomers; ecgonine, its derivatives, their salts, isomers, and salts of isomers; or any compound, mixture, or preparation which contains any quantity of any of the substances referred to in this paragraph.

The federal language is a model, in that it covers all the isomeric varieties of cocaine regardless of whether they are derived of the coca plant or synthesized in a chemical process (opening paragraph a). Additionally, in paragraph (4), the code includes the several isomeric "base" forms in which cocaine may appear and the several salts which may occur for each isomer. However, commingling coca with the opium section is clumsy from a rhetorical point of view because the two drugs are very different in structure, receptor sites in the brain and addictive qualities.

The federal code provides a precedent for language defining cocaine in a manner not requiring the extra testing for determining whether an exhibit is natural or synthetic cocaine. Similar language can be adapted to the current Massachusetts statute, applied in the cocaine section. The proposed change in the Massachusetts law is to drop the cocaine section in its current form M.G.L. Chapter 94c class B paragraph (4) and add the new language to the end of M.G.L. chapter 94c class B in its own paragraph.

Thus, with the elimination of the original cocaine text, the following amended language should be added to the end of M.G.L. Chapter 94c class B schedule:

(f) Unless specifically excepted or unless listed in another schedule, any of the following substances whether produced directly or indirectly by extraction from substances of vegetable origin, or independently by means of chemical synthesis, or by a combination of extraction and chemical synthesis:

coca leaves (except coca leaves and extracts of coca leaves from which cocaine, ecgonine, and derivatives of ecgonine or their salts have been removed) and the salts, optical and geometric isomers and salts of isomers; of cocaine, ecgonine, their derivatives, their salts, isomers and salts of their isomers; or any compound, mixture, or preparation which contains any quantity of any of the substances referred to in this paragraph.

Based upon the federal model which is not limited to the "natural" cocaine isomer and the need to clarify certain other isomers in a more specific manner, the following proposal is made regarding the cocaine statute. The current cocaine paragraph is deleted from its current position within the opium section and the new cocaine paragraph is substituted into M.G.L. 94c, class B.

The second amendment proposed considers another language structure problem concerning the compound 3,4, methylenedioxy methamphetamine (MDMA). MDMA, also known as Ecstasy, is listed in the drug statute as a class B drug. It is listed in M.G.L. Chapter 94c, section 31 as a class B drug on line (8). Like many other drugs MDMA has a basic structure, from which a variety of salts may be prepared. However, MDMA is listed in isolation on line (8) with no qualifying paragraph to include its salts. This is the most *prevalent* drug with this language defect. The three drugs listed immediately prior to MDMA are also subject to this flaw.

As it stands, the particular schedule B section reads as follows:

- (5) Phenyl-2-Propanone (P2P)
- (6) Phenylcyclohexylamine (PCH)
- (7) Piperidinocyclohexanecarbonitrile (PCC)
- (8) 3, 4 methylendioxy methamphetamine (MDMA)

Each of these base compounds is noted in isolation, without a qualifying paragraph which would include the various salts which may exist for each form. These four compounds are listed as 5,6,7 and 8 immediately beneath the qualifying paragraph for cocaine.

The most useful and unequivocal manner of amending this defect would be to strike schedule B lines 5,6,7 and 8 at their current position and re-list them at the end of the class B schedule with their own qualifying paragraph as below:

(f) Unless specifically excepted or unless listed in another schedule, any material, compound, mixture or preparation that contains any quantity of the following substances including its salts, isomers and salts of isomers whenever the existence of such salts, isomers and salts of isomers is possible within the specific chemical designations:

- (1) Phenyl-2-Propanone (P2P)
- (2) Phenylcyclohexylamine (PCH)
- (3) Piperidinocyclohexanecarbonitrile (PCC)
- (4) 3,4 methylenedioxy methamphetamine (MDMA)

To reiterate, the intention of the statute was to provide that the various forms of these agents would be proscribed. The existing language is inadequate to the task and will be repaired with the changes noted above.

The third amendment to the existing statutes would be to relocate certain drugs currently scheduled at the lowest level of concern at Class E to the level A analogous to their Schedule I level in the federal statutes. Each of these compounds has a history of interdiction at the distribution level which could only be prosecuted as class E drugs. They are:

4-bromo-2,5-dimethoxyphenylethylamine	synonyms/street terms	2CB, Nexus
2,5-dimethoxy-4-(n)-propylthiophenethylamine	synonym/street term	2C-T-7
N-benzylpiperazine	synonyms/street terms	1-benzylpiperazine, BZP

The final consideration for this proposal is to classify the psychogenic agents of the plant *Salvia Divinorum* (*salvia D*) as class C drugs. The plant itself has no distinguishing characteristics which distinguish it from other *salvia* species. Unlike marijuana, which has a unique combination of serrated palmate leaves and cystolithic hairs with which it may be identified, *salvia D* has no distinct botanical features. Therefore, the proposal is to classify the plant's hallucinogenic materials as class C drugs at the level of peyote or mescaline.

The earliest recognized psychedelic compound in *Salvia D* is salvinorin A. This agent is responsible for a short duration trip of fifteen minutes to an hour. The agent causes hallucinations and complete dissociation (inability to recognize one is altered.) Two longer acting hallucinogenic compounds are being sought by plant selection. The compounds are 2-methoxymethyl salvinorin B and 2-ethoxymethyl salvinorin B. In addition, although not hallucinogenic itself, the compound salvinorin B is an immediate synthetic precursor to the others and therefore meets the criteria for scheduling as a class C substance.

Therefore, the proposed change is to amend Chapter 94c Section 31 to include these compounds as class C materials on lines 17, 18, 19 and 20 as:

- (17) salvinorin A
- (18) salvinorin B
- (19) 2 - methoxymethyl salvinorin B
- (20) 2- ethoxymethyl salvinorin B

In conclusion, action upon the proposals presented above would benefit the Commonwealth in the following manner:

- 1) Laboratories would be spared a level of testing in cocaine analysis, permitting a redirection of time and resources to other efforts. Making the language more exacting with regard to cocaine and its isomers would make test results unequivocal. The problem of levamisole inhibiting certain tests would be eliminated.
- 2) Salts of MDMA and PCP precursors would be included as class B substances
- 3) several drugs with a history of distribution would be moved from Massachusetts class E status and raised to class A status analogous to their position in the federal schedules
- 4) hallucinogenic agents and a synthetic precursor to these agents, associated with the plant *Salvia Divinorum*, are classified as class C substances

SENATE No. 00797

By Mr. Joyce, petition (accompanied by bill, Senate, No. 797) of Joyce for legislation relative to updating the definition of cocaine [Joint Committee on the Judiciary].

The Commonwealth of Massachusetts

In the Year Two Thousand Eleven

An Act relative to updating the definition of cocaine.

Be it enacted by the Senate and House of Representatives in General Court assembled, and by the authority of the same,
as follows:

SECTION 1. Section 31 of Chapter 94c of the General Laws is hereby amended by striking subsection (a)(4) under the Class B schedule and substituting the following new subsection :-

"Subsection (f) Unless specifically excepted or unless listed in another schedule, any of the following substances whether produced directly or indirectly by extraction from substances of vegetable origin, or independently by means of chemical synthesis, or by a combination of extraction and chemical synthesis:

Coca leaves, and the salts, optical and geometric isomers and salts of isomers, excluding coca leaves and extracts of coca leaves from which cocaine, egonine, and derivatives of egonine or their salts have been removed; of cocaine, egonine, pseudococaine, allococaine and pseudoallococaine, their derivatives, their salts, isomers and salts of their isomers; or any compound, mixture, or preparation which contains any quantity of any of the substances referred to in this paragraph.

SECTION 2. This act shall take effect upon passage.

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SENATE No. 00798

By Mr. Joyce, petition (accompanied by bill, Senate, No. 798) of Joyce for legislation relative to updating the drug class A schedule [Joint Committee on the Judiciary].

The Commonwealth of Massachusetts

In the Year Two Thousand Eleven

An Act relative to updating the drug class A schedule.

Be it enacted by the Senate and House of Representatives in General Court assembled, and by the authority of the same, as follows:

SECTION 1. Section 31 of Chapter 94c of the General Laws is hereby amended by adding the following new subsections under subsection (a) of the Class A schedule:-

- | | |
|---|----------|
| (...) 4- bromo-2,5- dimethoxyphenylethylamine | (2C-B) |
| (...) 2,5- dimethoxy-4-(n)-propylthiophenethylamine | (2C-T-7) |
| (...) N-benzylpiperazine | (BZP) |

SECTION 2. This act shall take effect upon passage.

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By Mr. Joyce, petition (accompanied by bill, Senate, No. 801) of Joyce for legislation relative to the definition of methylenedioxy methamphetamine [Joint Committee on the Judiciary].

The Commonwealth of Massachusetts

In the Year Two Thousand Eleven

An Act relative to the definition of methylenedioxy methamphetamine.

Be it enacted by the Senate and House of Representatives in General Court assembled, and by the authority of the same, as follows:

SECTION 1. Section 31 of Chapter 94c of the General laws is hereby amended by striking Subsections (a)(5)-(8) under the Class B schedule in their entirety and replacing them with the following new subsections under the Class B schedule:-

"(f) Unless specifically excepted or unless listed in another schedule, any material, compound, mixture or preparation that contains any quantity of the following substances including salts, isomers and salts of isomers whenever the existence of such salts, isomers and salts of isomer is possible within the specific chemical designations:

- (1) Phenyl-2-propanone (p2p)
 - (2) Phenylcyclohexylamine (PCH)
 - (3) Piperidinocyclohexanecarbonitrile (PCC)
 - (4) 3, 4 methylenedioxy methamphetamine (MDMA)"

SECTION 2. This act shall take effect upon passage.

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SENATE No. 00802

By Mr. Joyce, petition (accompanied by bill, Senate, No. 802) of Kafka and Joyce for legislation relative to the drug Salvinorin [Joint Committee on the Judiciary].

The Commonwealth of Massachusetts

In the Year Two Thousand Eleven

An Act relative to the drug Salvinorin.

Be it enacted by the Senate and House of Representatives in General Court assembled, and by the authority of the same, as follows:

SECTION 1. Section 31 of Chapter 94e is hereby amended by inserting the following new subsections under subsection (e) of the Class C schedule: -

- (17) salvinorin A
- (18) salvinorin B
- (19) 2-methoxymethyl salvinorin B

SECTION 2. This act shall take effect upon passage.

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